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Sequence Listing was accepted.

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Reviewer: Durreshwar Anjum

Timestamp: [year=2009; month=7; day=24; hr=11; min=32; sec=3; ms=537; ]

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Application No: 10572529 Version No: 1.0

**Input Set:**

**Output Set:**

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**Finished:** 2009-07-15 14:38:58.940  
**Elapsed:** 0 hr(s) 0 min(s) 2 sec(s) 565 ms  
**Total Warnings:** 20  
**Total Errors:** 0  
**No. of SeqIDs Defined:** 59  
**Actual SeqID Count:** 59

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**Input Set:**

**Output Set:**

**Started:** 2009-07-15 14:38:56.375  
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Error code	Error Description
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SEQUENCE LISTING

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<130> 067437-5021-US

<140> 10572529

<141> 2009-07-15

<150> PCT/US2004/030261

<151> 2004-09-16

<150> US 60/503,447

<151> 2003-09-16

<160> 59

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<211> 43

<212> PRT

<213> Homo sapiens

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Asn Pro Ile Val Tyr Ala Phe Arg Ile Gln Lys Phe Arg Val Thr Phe  
1 5 10 15

Leu Lys Ile Trp Asn Asp His Phe Arg Cys Gln Pro Ala Pro Pro Ile  
20 25 30

Asp Glu Asp Leu Pro Glu Glu Arg Pro Asp Asp  
35 40

<210> 2

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2

Asn Pro Ile Ile Tyr Pro Cys Ser Ser Lys Glu Phe Lys Arg Ala Phe  
1 5 10 15

Val Arg Ile Leu Gly Cys Gln Cys Arg Gly Arg Gly Arg Arg Arg Arg  
20 25 30

Arg Arg Arg Arg Leu Gly Gly Cys Ala Tyr Thr Tyr Arg Pro Trp  
35 40 45

Thr Arg Gly Gly Ser Leu Glu Arg Ser Gln Ser Arg Lys Asp Ser Leu  
50 55 60

Asp Asp Ser Gly Ser Cys Leu Ser Gly Ser Gln Arg Thr Leu Pro Ser  
65 70 75 80

Ala Ser Pro Ser Pro Gly Tyr Leu Gly Arg Gly Ala Pro Pro Pro Val  
85 90 95

Glu Leu Cys Ala Phe Pro Glu Trp Lys Ala Pro Gly Ala Leu Leu Ser  
100 105 110  
Leu Pro Ala Pro Glu Pro Pro Gly Arg Arg Gly Arg His Asp Ser Gly  
115 120 125  
Pro Leu Phe Thr Phe Lys Leu Leu Thr Glu Pro Glu Ser Pro Gly Thr  
130 135 140  
Asp Gly Gly Ala Ser Asn Gly Gly Cys Glu Ala Ala Ala Asp Val Ala  
145 150 155 160  
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165 170 175  
Phe

<210> 3  
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<212> PRT  
<213> Homo sapiens

<400> 3  
Asn Pro Val Ile Tyr Thr Ile Phe Asn His Asp Phe Arg Arg Ala Phe  
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Lys Lys Ile Leu Cys Arg Gly Asp Arg Lys Arg Ile Val  
20 25

<210> 4  
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<212> PRT  
<213> Homo sapiens

<400> 4  
Asn Pro Val Ile Tyr Thr Ile Phe Asn Gln Asp Phe Arg Arg Ala Phe  
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Arg Arg Ile Leu Cys Arg Pro Trp Thr Gln Thr Ala Trp  
20 25

<210> 5  
<211> 30  
<212> PRT  
<213> Homo sapiens

<400> 5  
Asn Pro Val Ile Tyr Thr Val Phe Asn Gln Asp Phe Arg Pro Ser Phe  
1 5 10 15  
Lys His Ile Leu Phe Arg Arg Arg Arg Gly Phe Arg Gln  
20 25 30

<210> 6  
<211> 105  
<212> PRT  
<213> Homo sapiens

<400> 6  
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1	5	10	15
Gly Leu Leu Cys Cys Ala Arg Arg Ala Ala Arg Arg Arg His Ala Thr			
	20	25	30
His Gly Asp Arg Pro Arg Ala Ser Gly Cys Leu Ala Arg Pro Gly Pro			
	35	40	45
Pro Pro Ser Pro Gly Ala Ala Ser Asp Asp Asp Asp Asp Asp Val Val			
	50	55	60
Gly Ala Thr Pro Pro Ala Arg Leu Leu Glu Pro Trp Ala Gly Cys Asn			
	65	70	75
Gly Gly Ala Ala Ala Asp Ser Asp Ser Ser Leu Asp Glu Pro Cys Arg			
	85	90	95
Pro Gly Phe Ala Ser Glu Ser Lys Val			
	100	105	

<210> 7  
<211> 92  
<212> PRT  
<213> Homo sapiens

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<400> 7
Asn Pro Leu Ile Tyr Cys Arg Ser Pro Asp Phe Arg Ile Ala Phe Gln
      1           5                  10                   15
Glu Leu Leu Cys Leu Arg Arg Ser Ser Leu Lys Ala Tyr Gly Asn Gly
      20          25                  30
Tyr Ser Ser Asn Gly Asn Thr Gly Glu Gln Ser Gly Tyr His Val Glu
      35          40                  45
Gln Glu Lys Glu Asn Lys Leu Leu Cys Glu Asp Leu Pro Gly Thr Glu
      50          55                  60
Asp Phe Val Gly His Gln Gly Thr Val Pro Ser Asp Asn Ile Asp Ser
      65          70                  75                   80
Gln Gly Arg Asn Cys Ser Thr Asn Asp Ser Leu Leu
      85          90

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<210> 8  
<211> 120  
<212> PRT  
<213> *Homo sapiens*

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<400> 8
Asn Pro Ile Ile Tyr Ala Phe Asn Ala Asp Phe Arg Lys Ala Phe Ser
   1           5           10           15
Thr Leu Leu Gly Cys Tyr Arg Leu Cys Pro Ala Thr Asn Asn Ala Ile
   20          25          30
Glu Thr Val Ser Ile Asn Asn Asn Gly Ala Ala Met Phe Ser Ser His
   35          40          45
His Glu Pro Arg Gly Ser Ile Ser Lys Glu Cys Asn Leu Val Tyr Leu
   50          55          60
Ile Pro His Ala Val Gly Ser Ser Glu Asp Leu Lys Lys Glu Glu Ala
   65          70          75          80
Ala Gly Ile Ala Arg Pro Leu Glu Lys Leu Ser Pro Ala Leu Ser Val
   85          90          95
Ile Leu Asp Tyr Asp Thr Asp Val Ser Leu Glu Lys Ile Gln Pro Ile
  100         105         110
Thr Gln Asn Gly Gln His Pro Thr
  115         120

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<210> 9  
<211> 22  
<212> PRT  
<213> Homo sapiens

<400> 9  
Asn Pro Ile Ile Tyr Thr Thr Phe Asn Ile Glu Phe Arg Lys Ala Phe  
1 5 10 15  
Leu Lys Ile Leu His Cys  
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<210> 10  
<211> 22  
<212> PRT  
<213> Homo sapiens

<400> 10  
Asn Pro Val Ile Tyr Thr Thr Phe Asn Ile Glu Phe Arg Lys Ala Phe  
1 5 10 15  
Leu Lys Ile Leu Ser Cys  
20

<210> 11  
<211> 24  
<212> PRT  
<213> Homo sapiens

<400> 11  
Asn Pro Val Ile Tyr Thr Val Phe Asn Ala Glu Phe Arg Asn Val Phe  
1 5 10 15  
Arg Lys Ala Leu Arg Ala Cys Cys  
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<210> 12  
<211> 123  
<212> PRT  
<213> Homo sapiens

<400> 12  
Asn Pro Val Ile Tyr Ala Phe Asn Ala Asp Phe Gln Lys Val Phe Ala  
1 5 10 15  
Gln Leu Leu Gly Cys Ser His Phe Cys Ser Arg Thr Pro Val Glu Thr  
20 25 30  
Val Asn Ile Ser Asn Glu Leu Ile Ser Tyr Asn Gln Asp Ile Val Phe  
35 40 45  
His Lys Glu Ile Ala Ala Ala Tyr Ile His Met Met Pro Asn Ala Val  
50 55 60  
Thr Pro Gly Asn Arg Glu Val Asp Asn Asp Glu Glu Glu Gly Pro Phe  
65 70 75 80  
Asp Arg Met Phe Gln Ile Tyr Gln Thr Ser Pro Asp Gly Asp Pro Val  
85 90 95  
Ala Glu Ser Val Trp Glu Leu Asp Cys Glu Gly Glu Ile Ser Leu Asp

100 105 110  
Lys Ile Thr Pro Phe Thr Pro Asn Gly Phe His  
115 120

<210> 13  
<211> 47  
<212> PRT  
<213> Homo sapiens

<400> 13  
Asn Pro Met Cys Tyr Ala Leu Cys Asn Lys Ala Phe Arg Asp Thr Phe  
1 5 10 15  
Arg Leu Leu Leu Leu Cys Arg Trp Asp Lys Arg Arg Trp Arg Lys Ile  
20 25 30  
Pro Lys Arg Pro Gly Ser Val His Arg Thr Pro Ser Arg Gln Cys  
35 40 45

<210> 14  
<211> 31  
<212> PRT  
<213> Homo sapiens

<400> 14  
Asn Pro Ala Cys Tyr Ala Leu Cys Asn Ala Thr Phe Lys Lys Thr Phe  
1 5 10 15  
Lys His Leu Leu Met Cys His Tyr Lys Asn Ile Gly Ala Thr Arg  
20 25 30

<210> 15  
<211> 51  
<212> PRT  
<213> Homo sapiens

<400> 15  
Asn Pro Val Cys Tyr Ala Leu Cys Asn Lys Thr Phe Arg Thr Thr Phe  
1 5 10 15  
Lys Met Leu Leu Leu Cys Gln Cys Asp Lys Lys Lys Arg Arg Lys Gln  
20 25 30  
Gln Tyr Gln Gln Arg Gln Ser Val Ile Phe His Lys Arg Ala Pro Glu  
35 40 45  
Gln Ala Leu  
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<210> 16  
<211> 31  
<212> PRT  
<213> Homo sapiens

<400> 16  
Asn Pro Ala Cys Tyr Ala Leu Cys Asn Ala Thr Phe Lys Lys Thr Phe  
1 5 10 15  
Arg His Leu Leu Leu Cys Gln Tyr Arg Asn Ile Gly Thr Ala Arg  
20 25 30

<210> 17  
<211> 42  
<212> PRT  
<213> Homo sapiens

<400> 17  
Asn Pro Ile Cys Tyr Ala Leu Cys Asn Arg Thr Phe Arg Lys Thr Phe  
1 5 10 15  
Lys Met Leu Leu Leu Cys Arg Trp Lys Lys Lys Val Glu Glu Lys  
20 25 30  
Leu Tyr Trp Gln Gly Asn Ser Lys Leu Pro  
35 40

<210> 18  
<211> 24  
<212> PRT  
<213> Homo sapiens

<400> 18  
Asn Pro Val Ile Tyr Ala Tyr Phe Asn Lys Asp Phe Gln Asn Ala Phe  
1 5 10 15  
Lys Lys Ile Ile Lys Cys Lys Phe  
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<210> 19  
<211> 26  
<212> PRT  
<213> Homo sapiens

<400> 19  
Asn Pro Ile Ile Tyr Thr Met Ser Asn Glu Asp Phe Lys Gln Ala Phe  
1 5 10 15  
His Lys Leu Ile Arg Phe Lys Cys Thr Ser  
20 25

<210> 20  
<211> 24  
<212> PRT  
<213> Homo sapiens

<400> 20  
Asn Pro Leu Leu Tyr Thr Ser Phe Asn Glu Asp Phe Lys Leu Ala Phe  
1 5 10 15  
Lys Lys Leu Ile Arg Cys Arg Glu  
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<210> 21  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 21  
Asn Pro Ile Ile Tyr Cys Leu Arg Asn Gln Glu Val Lys Arg Ala Leu  
1 5 10 15  
Cys Cys Ile Leu His Leu Tyr Gln His Gln Asp Pro Asp Pro Lys Lys  
20 25 30  
Gly Ser Arg Asn Val  
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<210> 22  
<211> 27  
<212> PRT  
<213> Homo sapiens

<400> 22  
Asn Pro Leu Ile Tyr Thr Leu Arg Asn Met Glu Val Lys Gly Ala Leu  
1 5 10 15  
Arg Arg Leu Leu Gly Lys Gly Arg Glu Val Gly  
20 25

<210> 23  
<211> 62  
<212> PRT  
<213> Homo sapiens

<400> 23  
Asn Pro Leu Phe Tyr Gly Phe Leu Gly Lys Lys Phe Lys Arg Tyr Phe  
1 5 10 15  
Leu Gln Leu Leu Lys Tyr Ile Pro Pro Lys Ala Lys Ser His Ser Asn  
20 25 30  
Leu Ser Thr Lys Met Ser Thr Leu Ser Tyr Arg Pro Ser Asp Asn Val  
35 40 45  
Ser Ser Ser Thr Lys Lys Pro Ala Pro Cys Phe Glu Val Glu  
50 55 60

<210> 24  
<211> 50  
<212> PRT  
<213> Homo sapiens

<400> 24  
Asn Pro Phe Leu Tyr Cys Phe Val Gly Asn Arg Phe Gln Gln Lys Leu  
1 5 10 15  
Arg Ser Val Phe Arg Val Pro Ile Thr Trp Leu Gln Gly Lys Arg Glu  
20 25 30  
Ser Met Ser Cys Arg Lys Ser Ser Ser Leu Arg Glu Met Glu Thr Phe  
35 40 45  
Val Ser  
50

<210> 25  
<211> 51  
<212> PRT  
<213> Homo sapiens

<400> 25  
Asn Pro Leu Ile Tyr Ala Phe Ile Gly Gln Lys Phe Arg His Gly Leu  
1 5 10 15  
Leu Lys Ile Leu Ala Ile His Gly Leu Ile Ser Lys Asp Ser Leu Pro  
20 25 30  
Lys Asp Ser Arg Pro Ser Phe Val Gly Ser Ser Ser Gly His Thr Ser  
35 40 45  
Thr Thr Leu  
50

<210> 26  
<211> 67  
<212> PRT  
<213> Homo sapiens

<400> 26  
Asn Pro Leu Ile Tyr Ala Phe Ala Gly Glu Lys Phe Arg Arg Tyr Leu  
1 5 10 15  
Tyr His Leu Tyr Gly Lys Cys Leu Ala Val Leu Cys Gly Arg Ser Val  
20 25 30  
His Val Asp Phe Ser Ser Ser Glu Ser Gln Arg Ser Arg His Gly Ser  
35 40 45  
Val Leu Ser Ser Asn Phe Thr Tyr His Thr Ser Asp Gly Asp Ala Leu  
50 55 60  
Leu Leu Leu  
65

<210> 27  
<211> 59  
<212> PRT  
<213> Homo sapiens

<400> 27  
Asn Pro Ile Leu Tyr Asn Leu Val Ser Ala Asn Phe Arg His Ile Phe  
1 5 10 15  
Leu Ala Thr Leu Ala Cys Leu Cys Pro Val Trp Arg Arg Arg Arg Lys  
20 25 30  
Arg Pro Ala Phe Ser Arg Lys Ala Asp Ser Val Ser Ser Asn His Thr  
35 40 45  
Leu Ser Ser Asn Ala Thr Arg Glu Thr Leu Tyr  
50 55

<210> 28  
<211> 107  
<212> PRT  
<213> Homo sapiens

<400> 28  
Asn Pro Ile Ile Tyr Cys Cys Leu Asn Asp Arg Phe Arg Leu Gly Phe  
1 5 10 15  
Lys His Ala Phe Arg Cys Cys Pro Phe Ile Ser Ala Gly Asp Tyr Glu  
20 25 30  
Gly Leu Glu Met Lys Ser Thr Arg Tyr Leu Gln Thr Gln Gly Ser Val

35	40	45
Tyr Lys Val Ser Arg Leu Glu Thr Thr Ile Ser Thr Val Val Gly Ala		
50	55	60
His Glu Glu Glu Pro Glu Asp Gly Pro Lys Ala Thr Pro Ser Ser Leu		
65	70	75
Asp Leu Thr Ser Asn Cys Ser Ser Arg Ser Asp Ser Lys Thr Met Thr		
85	90	95
Glu Ser Phe Ser Phe Ser Ser Asn Val Leu Ser		
100	105	

<210> 29  
<211> 51  
<212> PRT  
<213> Homo sapiens

<400> 29

Asn Pro Trp Ile Tyr Ala Ser Phe Ser Ser Ser Val Ser Ser Glu Leu		
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Arg Ser Leu Leu Cys Cys Ala Arg Gly Arg Thr Pro Pro Ser Leu Gly		
20	25	30
Pro Gln Asp Glu Ser Cys Thr Thr Ala Ser Ser Ser Leu Ala Lys Asp		
35	40	45
Thr Ser Ser		
50		

<210> 30  
<211> 83  
<212> PRT  
<213> Homo sapiens

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Asn Pro Val Ile Tyr Asn Leu Met Ser Gln Lys Phe Arg Ala Ala Phe		
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Arg Lys Leu Cys Asn Cys Lys Gln Lys Pro Thr Glu Lys Pro Ala Asn		
20	25	30
Tyr Ser Val Ala Leu Asn Tyr Ser Val Ile Lys Glu Ser Asp His Phe		
35	40	45
Ser Thr Glu Leu Asp Asp Ile Thr Val Thr Asp Thr Tyr Leu Ser Ala		
50	55	60
Thr Lys Val Ser Phe Asp Asp Thr Cys Leu Ala Ser Glu Val Ser Phe		
65	70	75
Ser Gln Ser		80

<210> 31  
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<212> PRT  
<213> Homo sapiens

<400> 31

Asn Pro Trp Ile Tyr Met Leu Phe Thr Gly His Leu Phe His Glu Leu		
1	5	10
Val Gln Arg Phe Leu Cys Cys Ser Ala Ser Tyr Leu Lys Gly Arg Arg		
20	25	30

Leu Gly Glu Thr Ser Ala Ser Lys Lys Ser Asn Ser Ser Ser Phe Val  
35 40 45  
Leu Ser His Arg Ser Ser Ser Gln Arg Ser Cys Ser Gln Pro Ser Thr  
50 55 60  
Ala  
65

<210> 32  
<211> 75  
<212> PRT  
<213> Homo sapiens

<400> 32  
Asn Pro Val Leu Tyr Ser Leu Met Ser Ser Arg Phe Arg Glu Thr Phe  
1 5 10 15  
Gln Glu Ala Leu Cys Leu Gly Ala Cys Cys His Arg Leu Arg Pro Arg  
20 25 30  
His Ser Ser His Ser Leu Ser Arg Met Thr Thr Gly Ser Thr Leu Cys  
35 40 45  
Asp Val Gly Ser Leu Gly Ser Trp Val His Pro Leu Ala Gly Asn Asp  
50 55 60  
Gly Pro Glu Ala Gln Gln Glu Thr Asp Pro Ser  
65 70 75

<210> 33  
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<212> PRT  
<213> Homo sapiens

<400> 33  
Asn Pro Leu Val Tyr Cys Phe Met His Arg Arg Phe Arg Gln Ala Cys  
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Leu Glu Thr Cys Ala Arg Cys Cys Pro Arg Pro Pro Arg Ala Arg Pro  
20